From: Taylor, Kenneth [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP

(FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=384C83186AD44961AE3ADE13D438DEF9-KBTAYLOR1]

Sent: 1/30/2018 6:11:49 PM

To: AHILLIARD@TEXICAN.COM; smiller@cucainc.org; Mundt, Jennifer [/o=ExchangeLabs/ou=Exchange Administrative

Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=80dc52407a564282bd303137d5a244b6-jmundt]; Masemore, Sushma

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=69676b07acd44af4b2adac6de83cf19b-ssmasemore]; Kritzer, Jamie

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=cee93c49d01445a3b541bb327dcdc840-jbkritzer]; Tarr, Jeremy M

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=98859532088e4437968231eb6fef6b70-imtarr1]; Duncan, Russell

[/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=fce09fc2ad704b018811b5c52d6e9d0a-rwduncan1]

CC: Reid, Jeff [/o=ExchangeLabs/ou=Exchange Administrative Group

(FYDIBOHF23SPDLT)/cn=Recipients/cn=8364294626bb42b69af887a3072e22b3-jcreid]; myerswes@msn.com

**Subject**: FW: Atlantic Coast Pipeline - secure gas storage inquiry

Aubrey Hilliard, Sharon C. Miller, Jennifer Mundt; Jeremy Tarr, Sushma Masemore, Jamie Kritzer, and Russell Duncan,

Appended to this e-mail is the presentation made by Dr. Jeffrey C. Reid, PG, CPG and Wes Myers on secured gas storage.

If you have any questions, please contact me.

## Kenneth

Dr. Kenneth B. Taylor, PG State Geologist of North Carolina

N.C. Geological Survey Divison of Energy, Mineral and Land Resources North Carolina Department of Environmental Quality

919 707-9211 office 919 390-4767 mobile Kenneth.B.Taylor@ncdenr.gov

Archdale Building 5<sup>th</sup> Floor, Suite 527 512 N Salisbury St, Raleigh, NC 27604 1612 Mail Service Center Raleigh, NC 27699-1612





Email correspondence to and from this address is subject to the North Carolina Public Records Law and may be disclosed to third parties.

From: Reid, Jeff

Sent: Friday, January 26, 2018 11:38 AM

To: Taylor, Kenneth <kenneth.b.taylor@ncdenr.gov>

**Cc:** Wes Myers <myerswes@msn.com>; Reid, Jeff <jeff.reid@ncdenr.gov>

Subject: RE: Atlantic Coast Pipeline - secure gas storage inquiry

Kenneth – typo – sorry (19 October 2016).

Jeff

From: Reid, Jeff

Sent: Friday, January 26, 2018 11:34 AM

To: Taylor, Kenneth < kenneth.b.taylor@ncdenr.gov>

Cc: Reid, Jeff <jeff.reid@ncdenr.gov>; Wes Myers <myerswes@msn.com>

Subject: Atlantic Coast Pipeline - secure gas storage inquiry

Kenneth -

The information that you seek is contained in **Carpenter, Reid and Myers, 2017**, "Underground Storage of Refrigerated Natural Gas In Granites of the Southeastern U.S.," NC Geological Survey, Open-File Report 2017-02. The internal working concept management plan was 91 October 2016 (Reid and others, 2016). The first public presentation was an oral presentation in March 2017 at the Southeastern Section, Geological Society of America (Carpenter and others, 2017). The slides were subsequently improved following Dr. Carpenter's passing, and the improved slides were incorporated into NCGS Open-File Report 2017-02 (see URL

https://files.nc.gov/ncdeq/Energy%20Mineral%20and%20Land%20Resources/Geological%20Survey/OFRs Geological S urvey/NCGS OFR 2017-02 Refrigerated gas.pdf).

The Carpenter presentation was preceded by Dr. Myers' oral presentation on the "Potential for special purpose underground facilities in granites of the Southeastern U.S.," (Myers, 2017). Full citations and links are on page 5 of NCGS Open-File Report 2017-02.

Dr. Myers and I have a special interest, as well as broad expertise in developing underground space in granites as a resource. Our internal management plan (available upon request), and summarized in NCGS Open-File Report 2017-02 summarizes a five-step plan to investigate these resources for the underground storage of refrigerated natural gas in excavated granite caverns along the planned pipeline route. The initial three steps would be performed by staff of the NCGS. Subsequent steps would involve significant capital expenditures and technical studies that would need to be performed by qualified contractors with expertise in the construction of underground caverns.

Please let Dr. Myers and I know if additional information is needed.

Thanks,

Jeff

Jeffrey C. Reid PhD, PG, CPG
Senior Geologist - Energy and Minerals
N.C. Geological Survey
Policy & Innovation Group – Office of the Secretary
N.C. Department of Environmental Quality
1612 Mail Service Center
Raleigh, North Carolina 27699-1612
919.707.9205 (new telephone number)

Email: jeff.reid@ncdenr.gov

Web: http://portal.ncdenr.org/web/lr/oilandgasresearch



E-mail correspondence to and from this address may be subject to the North Carolina Public Records Law and may be disclosed to third parties.